



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,854	12/21/2001	David Shadmon	100157.159	9629

23483 7590 03/02/2006

WILMER CUTLER PICKERING HALE AND DORR LLP
60 STATE STREET
BOSTON, MA 02109

EXAMINER

KISS, ERIC B

ART UNIT PAPER NUMBER

2192

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/034,854

Applicant(s)

SHADMON ET AL.

Examiner

Eric B. Kiss

Art Unit

2192

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the ~~new or amended~~ claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-33, as set forth in the Final Rejection mailed 01 November 2005.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Continuation of item 11: The request for reconsideration has been considered but does not place the application in condition for allowance because:

Applicants' arguments are not persuasive.

Both the instant invention and the relevant disclosure of Hughes are related to analyzing the performance of a disk drive controller. See Specification (12/21/2001) at pp. 1-3; Hughes, "Lifting the Lid" at pp. 1-2 ("Full speed ahead").

The portion of the Hughes reference at issue reads:

Many bugs can be difficult to eliminate as it is only possible to run the system at full speed. Consider a hard disk drive controller. If we reduce the speed of the system or—worse still—stop it, the head will crash into the surface of the disk. Obviously, this is disastrous. To investigate these bugs, we need to run the processor at its normal speed, but find a way of recording its behavior to allow investigation later.

Hughes at p. 1.

Applicants apparently concede that the instant invention adds additional overhead to the disk drive controller. See Remarks (01/13/2006) at p. 3; see also Specification (12/21/2001) at p. 16, line 19, through p. 17, line 3; Figs. 25-28 (06/17/2002).

Applicants have urged the examiner to consider a very literal interpretation of Hughes—that disk drive controllers can tolerate no additional overhead without the drive experiencing a catastrophic failure, *i.e.*, a head crash. See, e.g., Remarks (01/13/2006) at p. 4.

This interpretation advanced by Applicants raises some very serious issues regarding patentability of the instant application under 35 U.S.C. §§ 101, 112.

Applicants have not made any showing that the disk drive controller disclosed in the instant specification is somehow appreciably different from the disk drive controller disclosed by Hughes. Indeed, Applicants' disclosure does not adequately describe any


steps taken to specifically address any problems associated with disastrous consequences of the overhead that the instant invention creates.

It would seem that there are three possible conclusions:

- (1) The disk drive controller of the instant invention likewise cannot tolerate any additional overhead without experiencing catastrophic failure, and thus, the claimed invention is inoperable and lacks utility under 35 U.S.C. 101;
- (2) The disk drive controller of the instant invention is somehow different in a way that Applicants have failed to disclose, and thus, the claimed invention is not described in such a manner as to enable one of ordinary skill in the art to make and use the invention without undue experimentation (failing to meet the requirements of 35 U.S.C. § 112, first paragraph); or
- (3) Disk drive controllers can tolerate some, albeit minimal, additional overhead without experiencing catastrophic failure, and thus Hughes does not readily “teach away” from adding minimal overhead to achieve additional advantages in performance monitoring.

It is noted that there are presently no rejections of record under 35 U.S.C. §§ 101 and 112, and Applicants are not required to address grounds of rejection that have yet to be officially raised. However, the examiner respectfully requests that Applicants clarify their interpretation of Hughes in view of the state of the art in disk drive controller technology relied upon to enable their claimed invention.

In the absence of additional clarification from Applicants, the rejections under 35 U.S.C. § 103(a) are maintained.


TUAN DAM
SUPERVISORY PATENT EXAMINER